BOOMINATHAN ALAGIRISAMY

About Me

Aspiring Full Stack Developer skilled in building scalable web apps using JavaScript, React, Angular, Node.js, and REST APIs. Experienced in backend development with Python, SQL, and MongoDB. Proficient in AWS deployment, with hands-on work in IoT, AI/ML, and chatbot projects. Strong in Git, cloud services, and real-time systems.

MY Contact

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Hard Skill

Languages: Python, Java, JavaScript, SQL, Arduino

Web Technologies: React, Angular, HTML,

CSS, Node.js, RESTful APIs

Databases: MongoDB, MySQL, SQL **Cloud & DevOps:** AWS, Git, CI/CD (basic),

Deployment

Machine Learning & AI: CNN, TensorFlow, OpenCV, NLTK, Ollama

Tools & Platforms: VS Code, Postman,

Blender, Open3D, CAD

Soft Skill

- Communication: English, Tamil
- Problem-Solving: Analytical Thinking, Critical Thinking, Logical Thinking.

Education Background

 Dr. Mahalingam College of Engineering and Technology, Anna University, Pollachi

B.Tech in Artificial Intelligence and Data Science Graduation: June 2026

CGPA: 7.3 (Till VI)

Nachimuthu Polytechnic College, Pollachi

Mechanical engineering (Diploma)

Completed April 2023

Percentage: 77

 Bharath Vidhya Niketan Matric Higher Secondary School, Pollachi

Secondary Education (Class X)

Completed March 2020

Percentage: 60

Achievements

 1st Prize in Metaverse for Debugging & Code Design Efficiency (Oct 2024).

Professional Experience

Software Development- Intern

Centre for Innovation, Business Incubation, and Entrepreneurship (CIBIE), Pollachi

2024 (june) - 2024(july)

 Automated database monitoring with Python, reducing debugging time by 20%. Optimized SQL queries for efficiency, supported legacy data migration, and collaborated on sustainable database solutions with thorough documentation.

Projects

Desgin and Fabrication of CNC Laser Engaver

Nov 2022 - April 2023

 Engineered a portable CNC laser engraver with pantograph mechanism, programmed GRBL firmware on Arduino, and executed high-precision wood engravings.

Transformation 2D into 3D Home Design

Feb 2024 - May 2024

 Created a CNN-based model to convert 2D floor plans into realistic 3D home designs using Open3D and Blender.

Fire and Smoke Detection Using Convolutional Neural Networks

Oct 2024 - Nov 2024

 Designed a deep learning system using CNN, OpenCV, and TensorFlow in Python to detect fire and smoke for real-time safety monitoring.

IoT based Agriculture Monitoring System

Jan 2025- May 2025

 Built a real-time IoT monitoring app using React and JavaScript with sensor integration. Managed data via AWS and MongoDB. Planned ML-based crop health prediction.

Offline Chatbot Using Ollama and NLTK

May 2025- Jun 2025

 Developed a privacy-focused offline chatbot using Python, integrating the Ollama framework with NLTK for natural language processing and understanding.

Certificate

- Generative AI LinkedIn (2023)
- MySQL Server Management and Debugging CIBIE (2024)
- SQL basic HackerRank (2025)
- Java Programming Essentials Great Learning (2024)
- MERN Stack Prepinsta(2025)